

WHAT IS CLAIMED IS:

1. A thermal developing method for continuously and thermally developing thermal developing sheets which have a latent image formed thereon by exposure and various sizes,

5 wherein a minimum temperature recovery time required for thermally developing a sheet is determined from physical information about a thermally developed sheet, and the next thermal developing sheet is started to be developed after the minimum temperature recovery time passes.

10 2. A thermal developing method according to claim 1, wherein the physical information is constituted by a combination of at least one of a dimension in a direction of a length, a dimension in a direction of a width, a thickness and a material of the
15 thermal developing sheet.

3. A thermal developing method for continuously and thermally developing thermal developing sheets which have a latent image formed thereon by exposure and various sizes,

20 wherein minimum temperature recovery times required for thermally developing a next thermal developing sheet are determined from physical information about a thermally developed sheet and physical information about the next thermal developing sheet, respectively, and the longer time of the minimum temperature
25 recovery times is selected to be a minimum standby time and the next thermal developing sheet is started to be developed after

the selected minimum standby time passes.

4. A thermal developing method according to claim 3, wherein the physical information is constituted by a combination of at least one of a dimension in a direction of a length, a dimension in a direction of a width, a thickness and a material of the thermal developing sheet.

5. A thermal developing method for continuously and thermally developing thermal developing sheets which have a latent image formed thereon by exposure and various sizes, comprising the steps of:

determining a minimum temperature recovery time required for thermally developing a next thermal developing sheet from a size of a thermally developed sheet;

measuring a time required until a rear end of the thermal developing sheet is completely developed and a tip of the next thermal developing sheet is then started to be developed;

comparing the required time with the minimum temperature recovery time; and

starting to develop the next thermal developing sheet if the required time is equal to or greater than the minimum temperature recovery time as a result of the comparison.

6. A thermal developing method for continuously and thermally developing thermal developing sheets which have a

latent image formed thereon by exposure and various sizes, comprising the steps of:

acquiring information about a size of a next thermal developing sheet before a developing process;

- 5 measuring a time required until a rear end of the thermal developing sheet is completely developed and a tip of the next thermal developing sheet is then started to be developed;

- 10 determining a minimum temperature recovery time required for thermally developing the next thermal developing sheet from a size of a thermally developed sheet and a size of the next thermal developing sheet;

comparing the required time with the minimum temperature recovery time; and

- 15 starting to develop the next thermal developing sheet if the required time is equal to or greater than the minimum temperature recovery time as a result of the comparison.

7. A thermal developing apparatus for continuously and thermally developing thermal developing sheets which have a latent image formed thereon by exposure and various sizes, comprising:

- 25 sheet tip required time measuring means for measuring a time required until a rear end of the thermal developing sheet is completely developed and a tip of a next thermal developing sheet is then started to be developed;

minimum temperature recovery time determining means for

determining a minimum temperature recovery time required for thermally developing the next thermal developing sheet from a size of a thermally developed sheet; and

- 5 comparing means for comparing the required time measured by the sheet tip required time measuring means with the minimum temperature recovery time determined by the minimum temperature recovery time determining means.

- 10 8. The thermal developing apparatus according to claim 7, wherein the next thermal developing sheet is started to be developed if the required time is equal to or greater than the minimum temperature recovery time as a result of the comparison of the comparing means.

- 15 9. A thermal developing apparatus for continuously and thermally developing thermal developing sheets which have a latent image formed thereon by exposure and various sizes, comprising:

- 20 sheet size information acquiring means for acquiring information about a size of a next thermal developing sheet before a developing process;

- 25 sheet tip required time measuring means for measuring a time required until a rear end of the thermal developing sheet is completely developed and a tip of the next thermal developing sheet is then started to be developed;

minimum temperature recovery time determining means for

determining a minimum temperature recovery time required for thermally developing the next thermal developing sheet from a size of a thermally developed sheet and a size of the next thermal developing sheet; and

5 comparing means for comparing the required time measured by the sheet tip required time measuring means with the minimum temperature recovery time determined by the minimum temperature recovery time determining means.

10 10. The thermal developing apparatus according to claim 9, wherein the next thermal developing sheet is started to be developed if the required time is equal to or greater than the minimum temperature recovery time as a result of the comparison of the comparing means.

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